

REMARKS

Claims 38-69 are now presented for examination. Claims 38, 39, 40, 41, 44, and 45 have been amended to define still more clearly what Applicants regard as their invention. No change in scope is either intended or believed effected by the amendments made to at least Claims 40, 41, 44, and 45. The changes made to Claims 38 and 39 are supported in the original specification, at least from, for example, page 12, line 25 to page 13, line 2, and at page 38, lines 14-16. New Claims 46-69 have been added to provide Applicants with a more complete scope of protection. Claims 38, 39, 46, 50, 54, 58, 62 and 66 are in independent form.

Claims 38-45 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

In response to the rejection, it is respectfully submitted that the language in question is supported in the specification and drawings as originally filed, at least in the description accompanying Figs. 19A, 19B, 20A, and 20B, beginning at page 33, line 20 of the specification. One skilled in the art would clearly appreciate how to make and use the invention in view of those portions of the application.

Claims 41 and 44 also were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Without conceding the propriety of this rejection, the language deemed objectionable by the Examiner has been removed and replaced with other suitable language.

In view of the foregoing, it is believed that the Section 112 rejections have

been overcome, and thus their withdrawal is respectfully requested.

Claims 38-45 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent 6,815,001 or claim 12 of U.S. Patent No. 6,060,113.

Independent Claims 38 and 39 recite that the first detection step is performed while moving, relatively to the substrate, both of an ejector of the ink jet apparatus and a detector used in the first detection step. By virtue of this feature, a time from detection until applying (ejecting) the liquid can be shortened desirably.

As essentially admitted at page 4 of the Office Action, Claim 1 of U.S. Patent 6,815,001 and Claim 12 of U.S. Patent No. 6,060,113 do not recite or suggest these foregoing features. Although the Office Action asserts that “[t]his is an obvious modification of the art”, the Office Action cites nothing to support this allegation, let alone any reason why one skilled in the art would have been motivated to make such a “modification”. Moreover, Claim 1 of U.S. Patent 6,815,001 and Claim 12 of U.S. Patent No. 6,060,113 do not recite or suggest an evaporating step as recited in Claims 38 and 39.

In view of the foregoing, it is believed that the double patenting rejection has been overcome, and thus its withdrawal is respectfully requested.

Claims 38-45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 3,611,077 (*Smith*) in combination with JP 63-200041 or U.S. Patent 5,052,338 (*Maiorca et al.*).

Independent Claim 38, as amended, recites:

"38. A method for producing an electron-emitting device, the device comprising a conductive film including an electron emission region, the method comprising:

a first detection step for detecting a position on a plane of a substrate, to which a liquid containing an element of the conductive film and solvent or dispersion medium is to be ejected;

an ejecting step for ejecting the liquid by an ink jet apparatus to the position on the plane of the substrate detected by the first detection step; and

an evaporating step for evaporating the solvent or dispersion medium contained in the liquid,

wherein the first detection step is performed while moving, relatively to the substrate, both of an ejector of the ink jet apparatus and a detector used in the first detection step."

In *Smith*, a device is formed by a deposited droplet itself. *Smith* is relied on in the Office Action as teaching a thin film electron emitter, but the Office Action concedes that *Smith* does not teach or suggest detecting a position on a substrate for a coating material and detecting a state of the droplet supplied. Also, according to Claim 38, a liquid is ejected containing an element of a conductive film and solvent or dispersion medium, and an evaporating step is performed to evaporate the solvent or dispersion medium contained in the liquid. In Applicants' view, nothing has been found, or pointed out, in *Smith* that would teach or suggest these features.

Maiorca et al. is relied on in the Office Action as teaching "detection means", and refers merely to continuously supplying a paste onto a substrate by a so-called dispenser. However, nothing in that reference would teach or suggest an evaporating step as set forth in Claim 38. Accordingly, Claim 38 is clearly patentable over *Smith* and *Maiorca et al.*, whether considered separately or in combination.

JP63-200041 discloses ejecting a liquid onto a substrate by an ink jet apparatus, detecting whether or not there is a liquid ejected onto the substrate, and detecting a continuity state of the liquid droplets. However, nothing in JP63-200041 would teach or suggest an evaporating step as set forth in Claim 38. Accordingly, Claim 38 is clearly patentable over *Smith* and JP63-200041, whether considered separately or in combination.

Independent Claims 39, 54, and 58 are similar in many relevant respects to Claim 38, and also are believed to be clearly patentable over *Smith* and *Maiorca et al.*, and over *Smith* and JP63-200041, whether considered separately or in those respective combinations, for substantially the same reasons as is Claim 38.

Independent Claims 46, 50, 62, and 66 recite features that are similar in many relevant respects to those of Claim 38, except that they recite a film forming step for forming the conductive film on the substrate by heating the liquid (instead of an evaporation step). Nonetheless, those independent claims are believed to be clearly patentable over *Smith* and *Maiorca et al.*, and over *Smith* and JP63-200041, whether considered separately or in those respective combinations, because nothing in those references would teach or suggest methods as recited in those claims.

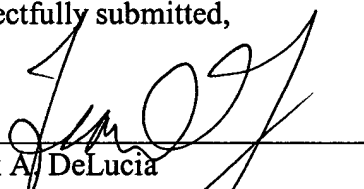
The other claims in this application each depend from one or another of the independent claims discussed above, and also are believed to be patentable over the art relied on in the Office Action, at least for the same reasons as are those respective independent claims. Since each dependent claim also recites an additional aspect of this

invention, however, the individual consideration or reconsideration, as the case may be, of each on its own merits is respectfully requested.

In view of the foregoing, Applicants respectfully request favorable consideration and early passage to issue of the present application.

Applicants' attorney of record may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Frank A. DeLucia', is written over a horizontal line.

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